IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Werner STOCKUM et al.

Group Art Unit.: 4118

Serial No.: 10/578,771

Examiner: NGUYEN, Hung D.

Filed: May 9, 2006

Title: COLOURED LASER MARKING

REPLY

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

SIR:

In response to the Office Action mailed on February 7, 2011, please consider the following.

The Office Action alleges that Shimokawa discloses a laser marking method comprising welding a polymer component to a surface under the action of laser light during inscription or marking, and that the polymer component is in a layer system, wherein the second layer of that layer system comprises a colorant and a polymer component.

None of these allegations are correct or find support in the disclosure of Shimokawa. Shimokawa discloses a laser marking method, where a label, which consists of a first layer of aluminium absorbing a visible ray and a second layer transilluminating the visible ray is applied onto a marking surface of a piece of work, then illuminating the surface of the piece of work through the label by means of a laser beam, so that a laser mark is formed in the piece of work and in the first layer of the label material. Then the label is removed, and a recorded label is produced which inscribed information is the same as the information in the piece of work (see, for example, claim 1).

As clearly and explicitly disclosed by Shimokawa, the first layer of the label, which is named "colour film 11" is made of aluminum and is formed by means of vacuum deposition upon the transparent polyester film 13 which is the "second layer" of the label (see column 3, lines 28-42). By the action of laser light, the "colour film," which does neither include a polymer nor a colorant, and the piece of work absorb the laser beam to be melted away so that a hole 11a in the colour film 11 and recess 10a in the piece of work are formed (see column 3,